

CLAIMS

1. A semiconductor manufacturing apparatus comprising a means for transferring an object to be processed, at least one plasma generating means for performing film formation treatment, etching treatment or ashing treatment,

and means for moving the plasma generating means in the intersecting direction with a transferring direction of the object to be processed,

wherein the film formation treatment, the etching treatment or the ashing treatment is performed on the object to be processed by transferring the object to be processed and a movement of the plasma generating means.

2. A semiconductor manufacturing apparatus according to claim 1, wherein the plasma generating means has a structure which is performed under atmospheric pressure or adjacent to atmospheric pressure.

3. A semiconductor manufacturing apparatus according to claim 1, wherein the means for transferring the object to be processed has a structure to transfer the object to be processed unidirectionally.

4. A semiconductor manufacturing apparatus according to claim 1, wherein the means for transferring the object to be processed has a structure to perform continuous or step-feed.

5. A semiconductor manufacturing apparatus comprising a means for

transferring an object to be processed, a plurality of plasma generating means for performing film formation treatment, etching treatment or ashing treatment,

wherein the plurality of plasma generating means are arranged in the intersecting direction with a transferring direction of the object to be processed, and

wherein film formation treatment, etching treatment or ashing treatment is performed on the object to be processed by transferring of the object to be processed and generating plasma in at least one of the plurality of plasma generating means.

6. A semiconductor manufacturing apparatus according to claim 5, wherein the plasma generating means has a structure which is performed under atmospheric pressure or adjacent to atmospheric pressure.

7. A semiconductor manufacturing apparatus according to claim 5, wherein the means for transferring the object to be processed has a structure to transfer the object to be processed unidirectionally.

8. A semiconductor manufacturing apparatus according to claim 5, wherein the means for transferring the object to be processed has a structure to perform continuous or step-feed.

9. A semiconductor manufacturing apparatus comprising a means for transferring an object to be processed, at least one droplet spraying means for spraying a droplet onto a surface of the object to be processed, and

a means for moving the droplet spraying means in the intersecting direction

with a transferring direction of the object to be processed,

wherein a droplet is attached to the object to be processed by transfer of the object to be processed and a movement of the droplet spraying means.

X 10. A semiconductor manufacturing apparatus according to claim 9, wherein the droplet is attached under atmospheric pressure or adjacent to atmospheric pressure.

11. A semiconductor manufacturing apparatus according to claim 9, wherein the means for transferring the object to be processed has a structure to transfer the object to be processed unidirectionally.

12. A semiconductor manufacturing apparatus according to claim 9, wherein the transfer of the object to be processed is continuous or step-feed.

13. A semiconductor manufacturing apparatus according to claim 9, wherein the droplet is an organic solvent containing organic resin or metal element.

14. A semiconductor manufacturing apparatus comprising a means for transferring an object to be processed, a plurality of droplet spraying means for spraying a droplet onto the surface of the object to be processed,

wherein the plurality of droplet spraying means are arranged in the intersecting direction with a transferring direction of the object to be processed,

and a droplet is attached to the object to be processed by the transfer of the object to be processed and spraying a droplet from at least one of the plurality of droplet

spraying means.

15. A semiconductor manufacturing apparatus according to claim 14, wherein the droplet is attached under atmospheric pressure or adjacent to atmospheric pressure.

16. A semiconductor manufacturing apparatus according to claim 14, wherein the means for transferring the object to be processed has a structure to transfer the object to be processed unidirectionally.

17. A semiconductor manufacturing apparatus according to claim 14, wherein the means for transferring the object to be processed has a structure to perform continuous or step-feed.

18. A semiconductor manufacturing apparatus according to claim 14, wherein the droplet is an organic solvent containing organic resin or a metal element.

19. A semiconductor manufacturing apparatus comprising a means for transferring an object to be processed, at least one plasma generating means for performing film formation treatment, etching treatment or ashing treatment, and at least one droplet spraying means for attaching a droplet on the object to be processed,

wherein the plasma generating means and the droplet spraying means have a means for moving in the intersecting direction with a transferring direction of the object to be processed,

and wherein the film formation treatment, etching treatment or ashing treatment

is performed or a droplet is attached on the object to be processed by transfer of the object to be processed and a movement of the plasma generating means and the droplet spraying means.

20. A semiconductor manufacturing apparatus according to claim 19, wherein the film formation treatment, the etching treatment or the ashing treatment, or the attachment of the droplet is performed under atmospheric pressure or adjacent to atmospheric pressure.

21. A semiconductor manufacturing apparatus according to claim 19, wherein the means for transferring the object to be processed has a structure to transfer the object to be processed unidirectionally.

22. A semiconductor manufacturing apparatus according to claim 19, wherein the means for transferring the object to be processed has a structure to perform continuous or step-feed.

23. A semiconductor manufacturing apparatus according to claim 19, wherein a plurality of treatment selected from the film formation treatment, the etching treatment, the ashing treatment or the attachment treatment of the droplet are performed simultaneously.

24. A semiconductor manufacturing apparatus comprising a means for transferring an object to be processed, a plurality of plasma generating means for

performing film formation treatment, etching treatment or ashing treatment on the object to be processed, a plurality of droplet spraying means for attaching a droplet on the object to be processed,

wherein the plurality of plasma generating means are arranged in the intersecting direction with a transferring direction of the object to be processed,

wherein the plurality of the droplet spraying means are arranged in the intersecting direction with a transferring direction of the object to be processed,

wherein the film formation treatment, the etching treatment or the ashing treatment is performed on the object to be processed by the transfer of the object to be processed and generating plasma in at least one of the plurality of plasma generating means, and

wherein attach the droplet on the object to be processed by the transfer of the object to be processed and spraying the droplet from the droplet spraying means.

25. A semiconductor manufacturing apparatus according to claim 24, wherein the film formation treatment, the etching treatment or the attachment of the droplet is performed under atmospheric pressure or adjacent to atmospheric pressure.

26. A semiconductor manufacturing apparatus according to claim 24, wherein the means for transferring the object to be processed has a structure to transfer the object to be processed unidirectionally.

27. A semiconductor manufacturing apparatus according to claim 24, wherein the means for transferring the object to be processed has a structure to perform

continuous or step-feed.

28. A semiconductor manufacturing apparatus according to claim 24, wherein a plurality of treatment selected from the film formation treatment, the etching treatment, the ashing treatment or the attachment treatment of the droplet are performed simultaneously.